505395199 03/26/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5441993

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| PATRICK LU | 02/27/2017 |
| KARTHIK KUMAR | 02/24/2017 |
| THOMAS WILLHALM | 02/21/2017 |
| FRANCESC GUIM BERNAT | 02/20/2017 |
| MARTIN P. DIMITROV | 02/21/2017 |

RECEIVING PARTY DATA

| Name: | INTEL CORPORATION |
|-----------------|----------------------------|
| Street Address: | 2200 MISSION COLLEGE BLVD. |
| City: | SANTA CLARA |
| State/Country: | CALIFORNIA |
| Postal Code: | 95054 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16336884 |

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 408-892-2662

Email: janece@compassiplaw.com
Correspondent Name: COMPASS IP LAW PC

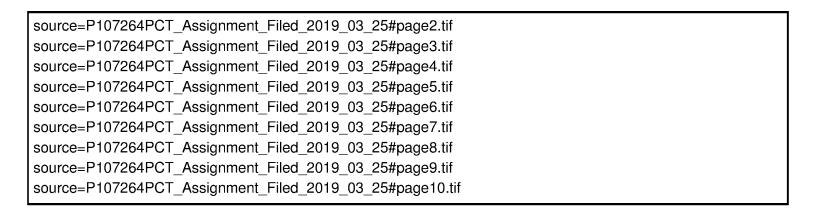
Address Line 1: 4804 NW BETHANY BLVD, STE. I-2 #237

Address Line 4: PORTLAND, OREGON 97229

| ATTORNEY DOCKET NUMBER: | P107264PCT-US |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | ROBERT B. O'ROURKE |
| SIGNATURE: | /Robert B. O'Rourke/ |
| DATE SIGNED: | 03/26/2019 |

Total Attachments: 10

source=P107264PCT_Assignment_Filed_2019_03_25#page1.tif



ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

Patrick Lu, Karthik Kumar, Thomas Willhalm, Francesc Guim Bernat and Martin P. Dimitrov

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|---|--------|------|-----------|----------------|------------------|
| Š | nerenv | SCH. | assign. | ancora | nsfer to: |

Intel Corporation

a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, Santa Clara, California, 95054 USA ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all other countries, in and to any and all inventions and improvements that are disclosed in the application for the patent entitled:

Main Memory Control Function With Prefetch Intelligence

(I hereby authorize and request my attorney, associated with customer number 45209, to insert on the designated lines below, the filing date and application number of said application when known.)

| ۲ | vhich was filed onSep | ntember 30, 2016 | | |
|---|-----------------------|------------------|-----------------------|-----|
| | Eb | Application Numb | per PCT/EP2016/001631 | and |
| | COUNTRY or Internatio | | | |

which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below,

and in and to said application and all Additional Applications, and all other patent applications that have been or shall be filed in the United States and all other countries and international filing offices on any of said inventions and improvements; and in and to all original and reissued patents that have been or shall be issued in the United States and all other countries and international filing offices on said inventions and improvements; and in and to all rights of priority resulting from the filing of said applications; as used herein "Additional Applications" includes but is not limited to design, utility, utility model, divisional, continuing, continuation-in-part, substitute, renewal, reissue, and national phase applications on said inventions and improvements;

and agree that said Assignee may apply for and receive a patent or patents for said inventions and improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all Additional Applications, and all other patent applications on any and all said inventions and improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors,

assigns, and legal representatives all facts known to the undersigned relating to said inventions and improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or legal representatives in securing and maintaining proper patent protection for said inventions and improvements and for vesting title to said inventions and improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

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| 7.4.4 | 03/21/50/1 |
|----------------------|-------------|
| Patrick Lu | Date signed |
| Karthik Kumar | Date signed |
| Thomas Willhalm | Date signed |
| Francesc Guim Bernat | Date signed |
| Martin P. Dimitrov | Date signed |

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, the undersigned inventor(s):

Patrick Lu, Karthik Kumar, Thomas Willhalm, Francesc Guim Bernat and Martin P. Dimitrov

hereby sell, assign, and transfer to:

Intel Corporation

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| which was filed on | September 30, 2016 | as | |
|----------------------|--------------------|-------------------------------|-----|
| EP COUNTRY or Int | ernational Office | mber <u>PCT/EP2016/001631</u> | and |

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Page 1 of 2

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| Patrick Lu | Date signed |
|----------------------|-------------|
| Mulling | 02-24-2017 |
| Karthik Kumar | Date signed |
| Thomas Willhalm | Date signed |
| Francesc Guim Bernat | Date signed |
| Martin P. Dimitrov | Date signed |

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Patrick Lu, Karthik Kumar, Thomas Willhalm, Francesc Guim Bernat and Martin P. Dimitrov

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| nnes below, the thing dat | e and application number of said a | shburanon waen sanam) | |
| which was filed o | n <u>September 30, 2016</u> | | |
| | Application No | umber <u>PCT/EP2016/001631</u> | and |
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| Patrick Lu | Date signed |
|----------------------|-------------|
| Karthik Kumar | Date signed |
| There Wille | 21-74-2017 |
| Thomas Willhalm | Date signed |
| Francesc Guim Bernat | Date signed |
| | |
| Martin P. Dimitrov | Date signed |

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Patrick Lu, Karthik Kumar, Thomas Willhalm, Francese Guim Hernat and Martin P. Dimitrov

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Main Memory Control Function With Prefetch Intelligence

(I hereby authorize and request my attorney, associated with customer number 45209, to insert on the designated lines below, the filing date and application number of said application when known.)

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which has been executed by the undersigned prior hereto or concurrently herewith on the date(s) indicated below.

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Page 1 of 2

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| Patrick Lu | Date signed |
|----------------------|-----------------------------|
| Karthik Kumar | Date signed |
| Thomas Willhalm | - Date signed |
| Francesc Guim Bernat | 20) Teb 120) 7 Date signed |
| Martin P. Dimitrov | Date signed |

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| Karthik Kumar | Date signed |
| Thomas Willhalm | Date signed |
| Francesc Guim Bernat | Date signed |
| Kalin Onashi | 2/21/2014 |
| Martin P. Dimitrov | Date signed |

Page 2 of 2